

Abstract of the Disclosure

5 A connection controller (402) includes a network topology cache (418) coupled to receive network topology data (405) of a network (400). Connection controller also can include a packing algorithm (414) coupled to receive a requested traffic pattern (403) of a packet (408), where the packing algorithm computes an actual traffic pattern (412) using the network topology data and the requested traffic pattern such that the network operates
10 as a strictly non-interfering network (419). Connection controller further includes a logical network state entity (420) coupled to communicate the actual traffic pattern to a source (406) corresponding to the packet.